Application No. 10/815,519 Amendment Dated April 18, 2007 In Reply to USPTO Office Action Dated January 19, 2007

Attorney Docket No.: 1928A1

#### **REMARKS**

# I. The Claims

In this Amendment, claims 1 and 5-15 have been canceled. As a result, claims 16 and 20-51 are now pending.

Claim 16 has been rewritten in independent form to include all of the limitations of former claim 1. In addition, the recitation that "the free radical curable portion is cured by free radical initiation" has been included in claim 16. Support for the subject matter of this recitation can be found in the application as filed at, for example, paragraphs [0027] and [0042]-[0044].

#### II. The Office Action

In the Office Action, the Examiner rejects claims 1, 5-16, and 20-51 under 35 U.S.C. §112, ¶2 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner also rejects claims 1, 5-12, 14-16, 20-27, and 29-51 under 35 U.S.C. 103(a) as being unpatentable over WO 99/47617 ("Van Den Berg").

Applicants acknowledge with appreciation the Examiner's indication that claims 13 and 28 contain allowable subject matter. Applicants respectfully traverse the foregoing rejections for the reasons that follow.

## A. The Rejections Under 35 U.S.C. §112, ¶2

In the Office Action, the Examiner asserts that it is unclear what is intended by "oligomer comprising" in view of "wherein the oligomer is substantially free of any ester linkages formed from the reaction of the polyol portion with a compound having more than one functional group." See Office Action at 2. Applicants respectfully traverse this rejection.

In paragraph [0009] of the instant specification, Applicants make clear what was intended by the phrase "substantially free of any ester linkages formed from the reaction of the polyol portion with a compound having more than one functional group". In particular, Applicants state:

As used herein, the phrase "substantially free of any ester linkages formed from the reaction of the polyol portion with a component having more than one functional group " means that the oligomers of the present invention are reacted from the polyol portion and free radical curable portion, outside the presence of

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any component with more than one functional group that reacts with the polyol portion to introduce an ester linkage onto the oligomer, such as, for example, a polybasic acid or an ester thereof, such as, for example, diethyl malonate. It will be appreciated that the presence of such a component to react with the polyol portion would result in alkyd resins of higher molecular weight. Because of the absence of such a component to cause polymerization, the oligomers of the present invention can, therefore, be molecules of relatively limited size and molecular weight. The monofunctionality of the unsaturated fatty acid and the free radical curable portion prevents polymerization, thereby limiting the size and weight of the oligomers of the present invention.

As a result, it is clear from the present specification that the phrase "substantially free of any ester linkages formed from the reaction of the polyol portion with a compound having more than one functional group" was meant to exclude the reaction of the reactants in the presence of a compound having more than one functional group <u>that introduces an ester linkage onto the oligomer.</u> As a result, claim 16 has been amended to clarify this point.

While acrylic acid may have more than one functional group, as indicated by the Examiner, it has only one functional group that will result in an ester linkage when reacted with a polyol in the manner described in paragraph [0022] of the specification. Similarly, the drying oils referenced by the Examiner also contain only one functional group that will result in an ester linkage when reacted with a polyol.

Applicants, therefore, respectfully request withdrawal of the pending rejections under 35 U.S.C. §112,  $\P 2$ .

## B. The Rejections Under 35 U.S.C. §103

In the Office Action, the Examiner rejects claims 1, 5-12, 14-16, 20-27, and 29-51 under 35 U.S.C. 103(a) as being unpatentable over Van Den Berg. In particular, according to the Examiner, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to make the instantly claimed oligomer from the disclosure of Van Den Berg because it is encompassed by the disclosure of Van Den Berg and would have been expected to give a coating having the properties disclosed by Van Den Berg. See Office Action at 3. Applicants respectfully traverse this rejection.

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In particular, the disclosure of Van Den Berg does not encompass the present invention as recited in amended claim 16. For example, in claim 16 it is now stated that in the claimed composition, the free radical curable portion of the oligomer is cured by free radical initiation. By contrast, in Van Den Berg, "the vinyl ethers, acetals and/or alkoxysilanes are cured under the influence of an acid and, in the case of acetals and/or alkoxysilanes, also in the presence of a small amount of moisture from the air." See Van Den Berg at p. 13, lines 14-18. Indeed, the presence of an acid or latent acid and groups reactive therewith <u>is</u> the invention of Van Den Berg. In particular, Van Den Berg states:

The invention <u>consists</u> in that an acid or latent acid and one or more compounds belonging to the group of vinyl ethers, acetals, and alkoxysilanes which are reactive in the presence of an acid are incorporated into a coating composition of the known type mentioned in the opening paragraph.

See Van Den Berg at p. 1, lines 22-26; see also claim 1. As a result, a modification of the Van Den Berg disclosure to achieve the claimed invention would destroy the intended function of the Van Den Berg invention. Thus, Van Den Berg neither discloses nor suggests any composition of the type presently claimed in independent claim 16. The remaining claims, claims 20-51, all depend, directly or indirectly, from claim 16.

For the foregoing reasons, Applicants respectfully request withdrawal of the pending rejections under 35 U.S.C. §103.

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# **CONCLUSION**

Applicants respectfully request entry of the foregoing amendments and allowance of the present application at an early date.

Respectfully Submitted,

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